

approximately 36 additional scans per month (42% increase in demand on radiology). 60% of these additional scans may have had negative biopsies and therefore unnecessary.

**Conclusions:** This pilot study illustrates that introducing pre-biopsy MRI would place weighty demand on already finite resources of the radiology department with financial implications estimated at £15,000/month. Furthermore, significant numbers of 'extra' MRI's would limit scanning capacity for other patients.

#### 0766: PSA DENSITY AS A PREDICTOR OF PROSTATE CANCER

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**Aim:** PSA has been instrumental in the diagnosis and management of prostate cancer since its discovery. However, there are limitations of using PSA alone as a predictor of prostate cancer. The aim of our study was to determine if PSA density (PSAD) can be used to increase the accuracy of predicting prostate cancer.

**Method:** We retrospectively analysed data from 265 patients who underwent TRUS-guided prostate biopsy between January 2006 and October 2010.

**Results:** The mean PSAD of patients with prostate cancer was 1.33 ng/ml/cm<sup>3</sup> (95% confidence interval 1.25 – 1.40). The mean PSAD of patients in whom prostate cancer was not detected was 0.19 ng/ml/cm<sup>3</sup> (95% confidence interval 0.14 – 0.23). There is a statistically significant difference between these two groups with a p value of <0.001. Applying a PSAD cut-off level of 0.15 ng/ml/cm<sup>3</sup>, as previously suggested, to our data gave a sensitivity of 89% and specificity of 57%.

**Conclusions:** Our findings suggest that PSAD can be used to increase the accuracy of predicting prostate cancer with a cut-off level of 0.15 ng/ml/cm<sup>3</sup> providing a reasonable sensitivity and specificity. This may be of particular value where the diagnosis remains unclear in patients who are at significant risk from biopsy.

#### 0767: IS LAPAROSCOPIC PYELOPLASTY A SUITABLE PROCEDURE FOR UROLOGICAL TRAINEES?

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**Aim:** Laparoscopic pyeloplasty is the gold standard treatment for ureteropelvic junction obstruction. Success rates are around 85-98%. In the public system trainees, under consultant supervision perform this procedure.

We report our outcomes [trainee series] and compare the functional [renographic] results with a series performed by the supervising consultant in the private sector [consultant series].

**Methods:** This retrospective audit spanned a 4-year period, 2007-2011. The primary outcome measure was improvement on MAG3 renography. Secondary outcomes included operative time, length of stay, post operative split function and re-do procedures.

**Results:** The trainee series consisted of 36 cases. Average split function improvement was less than 5%. Post-op complications include urine leaks [5%] and UTI [8%].

Post-operative resolution of obstruction on MAG3 was seen in 25 [70%] cases. Of those who failed, 64% underwent a second procedure. Ten out of 12 [85%] patients in the consultant series showed resolution of obstruction on MAG3 and one [8%] required a re-do pyeloplasty.

**Conclusion:** Our trainee-supervised series shows inferior outcomes to those in the reported literature. Less renographic resolution of obstruction was seen than in the consultant series. Trainees should be at an advanced stage in all aspects of laparoscopic surgery before performing this procedure.

#### 0772: THE EMERGING ROLE OF TRANSPERINEAL TEMPLATE PROSTATE BIOPSY IN PATIENTS WITH A PERSISTENTLY RAISED PSA DESPITE ONE NEGATIVE TRUS-GUIDED PROSTATE BIOPSY

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**Aim:** Current practice at our institution is that transperineal template prostate biopsy should be performed in the presence of a persistently

raised PSA despite two negative TRUS-guided prostate biopsies. We reviewed our data to determine the cancer detection rate in patients who underwent transperineal template prostate biopsy after one negative TRUS-guided prostate biopsy.

**Method:** We reviewed the results from 21 patients who underwent transperineal template prostate biopsy due to a persistently raised PSA after one negative TRUS-guided prostate biopsy.

**Results:** In total, 12 of 21 patients were found to have prostate cancer giving a detection rate of 57%. On the whole, the cancers detected were multifocal with a mean number of positive cores of 7.75 out of 36. The most common area of the prostate in which cancer was detected was the anterior region with 83% of patients having positive cores from this area.

**Conclusions:** Patients who undergo a second TRUS-guided prostate biopsy after an initial negative biopsy have a cancer detection rate of 10% (Djavan et al. J Urol. 2001 Nov; 166(5):1679-83). With a superior detection rate, transperineal template prostate biopsy should be considered rather than a second TRUS-guided prostate biopsy in the presence of a persistently raised PSA.

#### 0789: CLINICAL MICROSYSTEMS IN DESIGNING TRUS-BIOPSY SERVICES – A CLOSED-LOOP AUDIT OF A SPECIALIST NURSE-LED TRIAGE CLINIC FOR MEN WITH SUSPECTED PROSTATE CANCER

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**Aim:** To evaluate the clinical microsystems approach in redesigning transrectal ultrasound (TRUS) biopsy services to include a specialist nurse-led triage clinic in the assessment of men with suspected prostate cancer.

**Method:** Two prospective audit cycles of two-week wait referrals of men with suspected prostate cancer. A clinical microsystems approach was used to develop the current service, incorporating a nurse-led triage clinic. Patient knowledge about prostate-specific antigen (PSA) testing, biopsy rates, income, 31/62 breech rate and patient/clinician satisfaction were assessed.

**Results:** Men were poorly advised about PSA in primary care. The original low biopsy rate of 48% (31/65 patients, 95%CI 36%-61%) in men brought directly to TRUS-biopsy significantly improved with introduction of a triage clinic to 91% (50/55, p<0.0001, 95%CI 83%-99%). There were concomitant increases in income and patient satisfaction with a reduction in 31/62 breeches.

**Conclusions:** Introduction of a specialist nurse-led PSA clinic has resulted in appropriately triaged patients without resultant delay in the 31/62 pathway. Re-auditing over 2 cycles has demonstrated the value of a microsystems approach in designing services.

#### 0809: EVERY LITTLE HELPS – FINANCIAL IMPLICATIONS OF MISCODING UROLOGICAL PROCEDURES IN ERA OF AUSTERITY

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**Background:** Statistical classification of surgical procedures in England started in 1942. Introduction of payment by results in 2002 started moving hospitals away from block contracts. Current coding system uses Office of Population Census and Surveys (OPCS) classification. These along with other variables determine Human Resource Group (HRG) code defining final payment.

**Aims:** To find out coding accuracy of urological procedures in our Trust and its financial implications.

**Materials and Methods:** Retrospective analysis of urological procedures done over two months. All documented OPCS codes were recorded and reviewed by urology trainee along with head of professional coders. Revised OPCS codes were used to generate the final HRG codes.

**Results:** 121 cases were reviewed in study period. 21.4% of these cases were miscoded. 63% of these errors were due to mistakes by coding department. Nine of these changed OPCS codes led to change of final HRG code, and gain of £ 9826.

**Conclusion:** Our findings highlight the potential problem which can have significant financial impacts. It is important to train coding department so that when it comes to coding urological procedures, errors don't happen and we might be able to deal with Nicholson Challenge.